

Workshop on Air Quality and Opportunities to Expand Use of Alternative Transportation Fuels

2005 Integrated Energy Policy Report

California Energy Commission and
California Air Resources Board

July 8, 2005



Overview

- Background
- Petroleum Reduction Scenarios and Alternative Fuels
- Alternative Fuel Issues Raised in the 2005 Energy Report Proceedings, May 17 Workshop
- Air Quality Regulatory Activities (Air Resources Board)



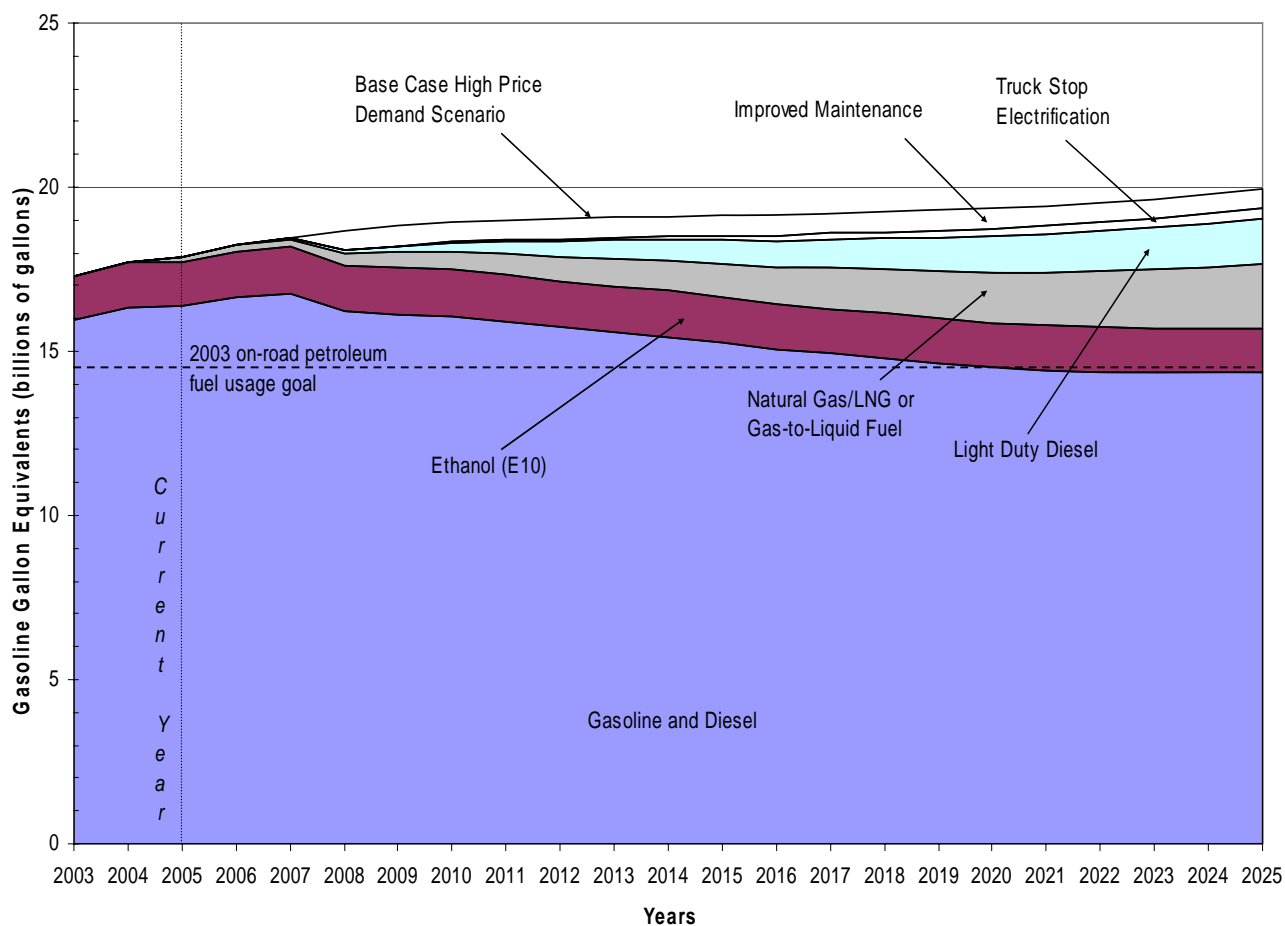
Background

- 2003 Energy Report (ER)
 - Reduce on-road fuel use to 15% below 2003 demand
 - Increase use of alternative fuels to 20% of on-road fuel use by 2020, 30% by 2030
- 2005 ER Workshop on Petroleum Reduction Options, May 17
 - Efficiency and alternative fuel options required to meet petroleum reduction goals
 - ER Committee directed staff to more fully establish a factual basis for alternative fuel barriers and actions related to meeting air quality goals



Petroleum Reduction Scenarios

Petroleum Fuel Demand and Petroleum Reduction Scenario #2



Air Quality and Alternative Fuel Issues

- Samples from the May 17 Workshop on Petroleum Reduction Options:
 - ...challenges of E10: insuring air quality is not compromised...
 - ...the state's predictive model currently imposes economic penalties in producing a fuel that does not increase NOx emissions...
 - ...ethanol's reduction in CO may be undervalued because current reactivity value is too high...
 - ...biodiesel has NOx and specification issues...
 - ...permeation effects of ethanol in gasoline...need to mitigate those emissions going forward...

